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Title:

AROMA DISPENSER;

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Applicant(s):

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ABSTRACT:

An aroma dispenser comprises a receptacle 4 for receiving an aromatic cartridge or aromatic crystals; the receptacle, when closed, being capable of maintaining the cartridge or crystals therein; at least one wall of the receptacle being constructed to permit the flow of air therethrough; the dispenser additionally comprising means for securing the dispenser in use to a vent grille; which securing means comprises a leg 22a, 22c having a foot 26a, 26b protruding therefrom, the leg extending from the receptacle to which it is integrally attached; and the leg and foot being so configured as to engage the vent grille, in use, either by embracing a bar of the grille in an other than solely-hooking manner; or by fitting between two adjacent such bars, and either frictionally engaging both whilst embracing at least one of them, or embracing both without necessarily frictionally engaging both.

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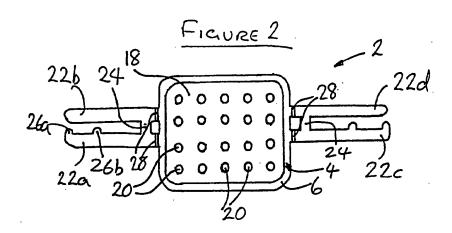
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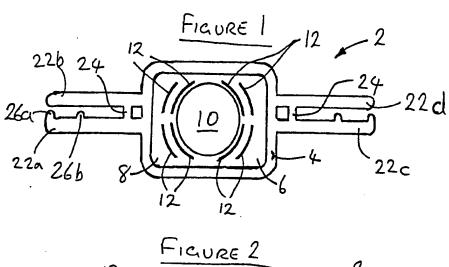
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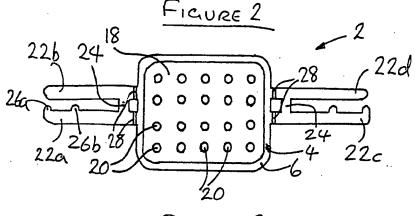
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- (56) Documents cited EP 0328702 A1 GB 0415405 A GB 2223171 A WO 91/00744 A1 US 4813344 A US 4523870 A US 4306892 A
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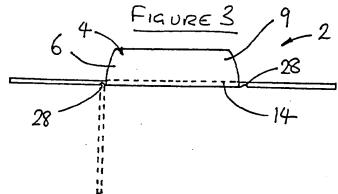
#### (54) Aroma dispenser

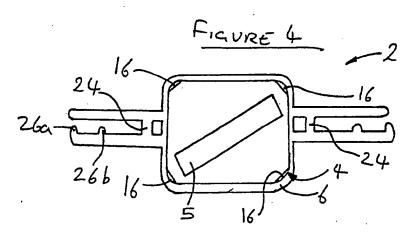
(57) An aroma dispenser comprises a receptacle 4 for receiving an aromatic cartridge or aromatic crystals; the receptacle, when closed, being capable of maintaining the cartridge or crystals therein; at least one wall of the receptacle being constructed to permit the flow of air therethrough; the dispenser additionally comprising means for securing the dispenser in use to a vent grille; which securing means comprises a leg 22a, 22c having a foot 26a, 26b protruding therefrom, the leg extending from the receptacle to which it is integrally attached; and the leg and foot being so configured as to engage the vent grille, in use, either by embracing a bar of the grille in an other than solely-hooking manner; or by fitting between two adjacent such bars, and either frictionally engaging both whilst embracing at least one of them, or embracing both without necessarily frictionally engaging both.











#### AROMA DISPENSER

#### Field of the Invention

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The present invention relates to aroma dispensers.

#### Background to the Invention

Aroma dispensers, <u>per se</u>, are well known as household and/or car accessories used to permeate a generally pleasing fragrance throughout the environment surrounding the dispenser. Typically the fragrance is provided from a source comprising a cartridge, a gel or a number of crystals. Commonly, the known dispensers permeate their fragrance by virtue of the circulation of normal air currents, and the dispenser will either be free-standing or fixed using a double-sided pressure-adhesive pad. These dispensers are found to be inefficient in permeating their aromas in certain situations.

There is on the market a dispenser comprising a gel containing receptacle adapted to be secured to a vent grille by a resilient plastics opposing double-hook, each hook being at the end of a leg extending from the body of the receptacle in use. The plastics legs are attached to the receptacle by an intermediate portion between the two legs being passed over a rigid plastics flange integrally attached to the receptacle. By securing the dispenser to a vent grille the flow of gas from the vent and into/through the dispenser may be advantageously used to assist in permeating the gel aroma.

It has been found that the dispenser described above suffers from certain disadvantages in use. For instance, it is possible for the legs to become detached from the receptacle and in some such circumstances for parts of the legs/receptacle to fall past the vent grille. The size of the dispenser has been found to be obtrusive and there is no provision for advertising space.

It is an object of the present invention to aim to overcome the disadvantage of the known dispensers.

#### Summary of the Invention

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According to the present invention, there is provided an aroma dispenser comprising a receptacle for receiving an aromatic cartridge or aromatic crystals; the receptacle, when closed, being capable of maintaining the cartridge or crystals therein; at least one wall of the receptacle being constructed to permit the flow of air therethrough; the dispenser additionally comprising means for securing the dispenser in use to a vent grille; which securing means comprises a leg, having a foot protruding therefrom, the leg extending from the receptacle to which it is integrally attached; and the leg and foot being so configured as to engage the vent grille, in use, either by embracing a bar of the grille in an other than solely-hooking manner; or by fitting between two adjacent such bars, and either frictionally engaging both whilst embracing at least one of them, or embracing both without necessarily frictionally engaging both.

The invention will now be described, by way of example only, with reference to the drawings that follow; in which:

#### Brief Description of the Drawings

Figure 1 is plan view of an aroma dispenser in accordance with the present invention.

Figure 2 is a plan view of the underside of the dispenser shown in Figure 1.

Figure 3 is a front view of the dispenser shown in Figures 1 and 2.

Figure 4 is a plan view of the underside of the dispenser shown in Figures 1 to 3 with the receptacle having been opened.

# Description of the Freferred Embodiment

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Referring now to Figures 1 to 4 of the drawings that follow, there is shown an aroma dispenser 2 comprising a receptacle 4 into which may be inserted an aromatic cartridge, or some aromatic crystals which may be sandwiched within two foam plastic layers, a cartridge 5 is shown in Figure 4. It is noted that if the receptacle 4 is suitable for receiving an aromatic cartridge then it will also be suitable for receiving aromatic crystals.

The receptacle is itself comprises a hopper 6 of substantially rectangular (with rounded corners) outline. The hopper 5 has a front (in use) face 8 and outwardly sloping side walls 9 extending from the front face. The front face 8 has a blank recessed circular area 10 partially surrounded by 8 symmetrically spaced slits 12, each slit 12 being radially spaced from the periphery of the area 10 and comprising a truncated sector centred about the mid-point of the front face 8, there being two slits in each quadrant surrounding the area 10. The slits 12 allow the flow of air through the front face (wall) 8.

The side walls 9 terminate around their inner periphery in a continuous resilient re-entrant lip 14 (shown by dashed lines in Figure 3). Within the hopper 6 there are four flanges 16, one at each corner, spaced from the re-entrant lip 14. In order to close the receptacle 4 (to maintain the cartridge or crystals therein) a plate 18, constituting a rear (in use) wall, is pushed into the

hopper 6. The plate 14 is substantially rectangular (with rounded corners) in outline and includes a plurality of spaced circular holes 20 to permit the flow of air therethrough. The corners of the plate 18 abut against the flanges 16, the plate being held in place by the resilience of the re-entrant lip 14. When the receptacle is so closed the plate 18 lies substantially flush with the edge of the hopper 6.

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Extending from each longitudinal end of the receptacle 4 are four resilient legs 22a-22d located off-centre in relation to the rear (in use) periphery of the hopper 6. The legs 22a, b are substantially similar to the legs 22c, d respectively, thus only the former legs 22a, b will now be referred to in the description hereinafter for simplicity.

Extending from the receptacle 4, substantially perpendicular thereto, are legs 22a and 22b which are approximately three-quarters of the length of the receptacle 4. The legs 22a, b are spaced and, in normal usage, remain substantially parallel relative to each other. They are joined by a cross-spar 24 which maintains the legs substantially in register in their normal usage. The cross spar 24 is located close, relative to the length of the legs, to the juncture of the legs 22a, b and the receptacle.

The leg 22a nearer to the centre of the side of the receptacle 4 includes two spaced feet 26a and 26b that extend from leg 22a approximately half-way towards leg 22b. The feet 26a, b have rounded ends and are integrally attached to leg 22a. Foot 26a is located at the end of leg 22a distant from the juncture of the legs 22a, b and the receptacle 4; whilst the foot 26b is located between foot 26a and cross-spar 24 - nearer to the other foot than to the cross-spar.

The legs 22a, b are integrally attached to the receptacle 4 by plastics hinges 28 formed by a thinner length of leg 22a, b material between the cross-spar 24 and the receptacle 4 as shown

in Figure 3, this Figure also shows the legs 22a, b in their fully hinged position (under normal usage) using dashed lines, the legs 22a, b may be positioned in any angular relation between the two extremes shown.

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The dispenser 2 is sold as a complete closed unit and finds a primary, though not exclusive, use as a car accessory. Once unwrapped the dispenser 2 may be immediately employed by bending the legs 22a-d (once again referring to all of the legs) to their fully hinged positions (Figure 3), or to any appropriate angle, the dispenser 2 can then be secured to a vent grille (not shown) by embracing a bar of the grille in an other than solelyhooking manner; for instance, if the bar is larger than the spacing between the parallel legs, by virtue of the resilience of the legs exerting a compressive (in the sense of subjecting to pressure regardless of any diminution in volume) force on the bar. Alternatively, the dispenser can be secured by fitting between two adjacent such bars, and either frictionally engaging both whilst embracing (e.g a foot engaging) one of them, or emoracing both of them without necessarily frictionally engaging both.

Because the legs 22a-d are integrally attached to the receptacle 4, are hinged and are resilient the dispenser 2 can be reliably secured to a wide variety of vent grilles, and also conveniently released therefrom. When so positioned the plate 18 will be towards the grille whilst the face 8 will be towards the environment. Having been so secured the perforated walls (in this case opposing walls 8 and 18) permit air to flow through the dispenser from the vent enabling the rapid and efficient dispersement of the contained aroma, from a cartridge or from crystals.

The recessed circular area 10 is suitable and intended for advertising material to be placed thereon. This finds especial benefit when the dispenser is used as a car accessory since so-

called 'car badges', identifying car manufacturers or specific vehicles, may be positioned in the area 10.

The dispenser 2 will conveniently be moulded from a plastics material and as part of the manufacturing process the piate 18 may be sealed (e.g by adhesive or otherwise) onto the receptacle 4.

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In a variation to the embodiment described above, the legs 22a-d may be extended by approximately 50% with the foot 26a staying at the end of the leg 22a or 22c and the foot 26b maintaining its position relative to the receptacle 4.

### CLAIMS:

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- 1. An aroma dispenser comprising a receptacle for receiving an aromatic cartridge or aromatic crystals; the receptacle, when closed, being capable of maintaining the cartridge or crystals therein; at least one wall of the receptacle being constructed to permit the flow of air therethrough; the dispenser additionally comprising means for securing the dispenser in use to a vent grille; which securing means comprises a leg, having a foot protruding therefrom, the leg extending from the receptacle to which it is integrally attached; and the leg and foot being so configured as to engage the vent grille, in use, either by embracing a bar of the grille in an other than solely-hooking manner; or by fitting between two adjacent such bars, and either frictionally engaging both whilst embracing at least one of them, or embracing both without necessarily frictionally engaging both.
- 2. An aroma dispenser, substantially as described herein, with reference to and as illustrated in the accompanying drawings.

# Patents Act 1977 Examiner's report to the Comptroller under Section 17 (The Search Report)

Application number 9101239.3

(i) UK CI (Edition K ) A5G GV	1
ii) OK CI (Edition 2. )	
	P N DAVEY
ii) Int CI (Edition ) A61L	
Databases (see over)	Date of Search
i) UK Patent Office	,
ii) ONLINE DATABASES : WPI	1 APRIL 1992
i) ONLINE DATABASES : WPI	

Documents considered relevant following a search in respect of claims 1, 2

ategory see over)	Identity of document and relevant passages	Relevant to claim(s)
X	GB 2223171 A (JOURNAL) - see eg page 1, lines 5-14	1
X	GB 0415405 A (PARKIN) - see eg figure 2	1
E,X	WO 91/00744 A1 (DELPHIC MANOR) - see eg figure 1	1
` x	EP 0328702 A1 (SYNT) - see eg column 3, lines 1-5	1
x	US 4813344 A (GREIF) - see eg column 2, lines 45-51 and column 4, lines 42-53	1
х	US 4523870 A (SPECTOR) - see eg column 4, lines 6-11 and figure 5	1
X	US 4306892 A (TEC-AIR) - see eg column 2, lines 52-65 and figure 1	1

Category Identity of document and relevant passages Relevant to claim(s)

## Categories of documents

- X: Document indicating lack of novelty or of inventive step.
- Y: Document indicating tack of inventive step if combined with one or more other documents of the same category.
- A: Document indicating technological background and/or state of the art.
- P: Document published on or after the declared priority date but before the filing date of the present application.
- E: Patent document published on or after, but with priority date earlier than, the filing date of the present application.
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Databases: The UK Patent Office database comprises classified collections of GB, EP, WO and US patent specifications as outlined periodically in the Official Journal (Patents). The on-line databases considered for search are also listed periodically in the Official Journal (Patents).